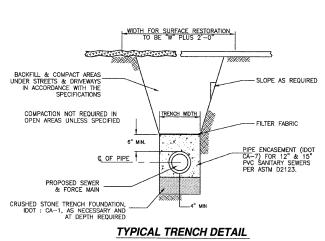
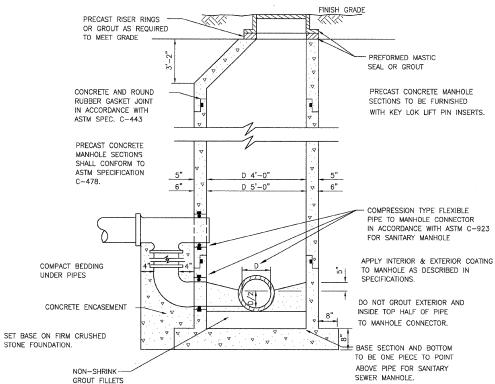
#### **Specifications**

- 1. Standard Specifications are Standard Specifications for Water and Sewer Main Construction in Illinois, 5th Edition, 1996 (SSWSMCI) and the Illinois Recommended Standards for Sewage Works (IRSSW).
- 2. The horizontal and/or vertical separation between sanitary sewers, force mains and water mains shall be in accordance with Section 370.350 of the IRSSW.
- 3. Gravity sanitary sewer shall be PVC, SDR 26 HW meeting ASTM D1784, D3034, F477, and D3212.
- 4. Sanitary sewer force main shall be PVC, SDR 21, meeting ASTM D2241.
- 5. Bedding and envelope material for sanitary sewer and force main shall be Class 1A (IDOT CA-7, Class A, crushed limestone or dolomite). Install per ASTM D2321-05. Bedding to be at least 6" over pipe. Install filter fabric on top of bedding.
- 6. Gravity sanitary sewer shall be air tested according to the SSWSMCI. Infiltration limits shall be 200 gallons per inch diameter per mile per day. Exfiltration limits shall be 240 gallons per inch diameter per mile per day.
- 7. Gravity sanitary sewer shall be deflection tested according to the SSWSMCI.
- 8. Leakage testing for manholes shall be in accordance with the IRSSW, Section 370.330 (ASTM C1244-05AE1).
- 9. Force main shall be leakage and pressure tested according to Section 41-2.13 of the SSWSMCI.
- 10. See attached standard details for manhole, manhole bottom, and trench detail.
- 11. Water main shall be PVC, SDR 21, meeting ASTM D1784, D3034, F477 and D3212.
- 12.34" corporation taps shall be placed at maximum 1,200 foot intervals for sampling point per IEPA guidelines.



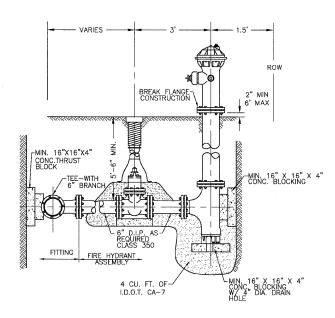
(NOT TO SCALE) SEWER "D" TRENCH WIDTH "W"



## DROP SANITARY MANHOLES. TYPE 1 FRAME AND CLOSED LID

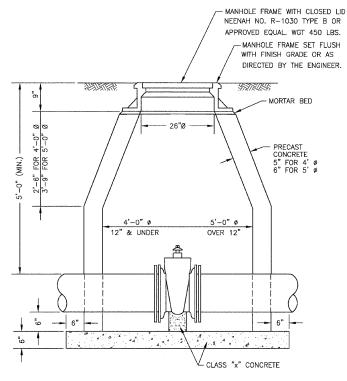
NO SCALE NOTE

ALL MANHOLES TO INCORPORATE SLOPE ACROSS MANHOLE FLOOR, SEE PLANS FOR ELEVATIONS. PLACE PIPE TO MANHOLE CONNECTOR ACCORDINGLY.



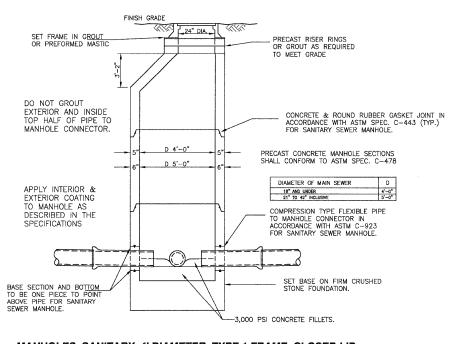
### FIRE HYDRANT ASSEMBLY

(NOT TO SCALE)



#### **VALVE VAULT DETAIL**

(NOT TO SCALE)



# MANHOLES, SANITARY, 4' DIAMETER, TYPE 1 FRAME, CLOSED LID

NO SCALE